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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,572	01/24/2002	Hideto Ohnuma	740756-2422	3447

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EXAMINER

KENNEDY, JENNIFER M

ART UNIT	PAPER NUMBER
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2812

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

10/053,572

Applicant(s)

OHNUMA, HIDETO

Examiner

Jennifer M. Kennedy

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see continuation sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-36.

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____


Jennifer M. Kennedy
Patent Examiner
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Applicant argues examiner's motivation for combining. The examiner maintains that the three criteria for establishing a prima facie case of obviousness has been met.

First, the examiner has provided a suggestion or motivation to combine from the references themselves. The examiner maintains that it would have been obvious to form the oxide film of Zhang et al. by the method of Ohtani et al. since the examiner notes that Zhang et al. does not disclose a particular method for forming the oxide layer 33, and therefore the particular method used to form the oxide layer lacks criticality in the invention of Zhang et al. One of ordinary skill in the art at the time the invention was made would have recognized that any known method could be used to form the oxide layer 33 in the absence of a particular suggestion by Zhang et al. Ohtani et al. discloses a method of forming a chemical oxide film (see column 2, lines 44-46, and column 6, lines 55-64). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the oxide layer of Zhang et al. by the method of Ohtani et al., since the method of forming an oxide layer lacks criticality in the invention of Zhang et al., and **since the method of Ohtani is a known method of forming an oxide that improves the surface characteristics of the underlying film** (see Ohtani et al. column 2, lines 39-46).

Applicant argues that the fact that there is no method for forming the oxide layer disclosed in Zhang does not mean that any known method could be used to form the oxide layer. The examiner maintains that because Zhang et al. does not disclose a particular method for forming the oxide layer 33 the particular method used to form the oxide layer lacks criticality in the invention of Zhang et al. and that one of ordinary skill

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in the art at the time the invention was made would have recognized that any known method could be used to form the oxide layer 33 in the absence of a particular suggestion by Zhang et al. Nevertheless, the method of Ohtani et al. teaches a method that would have had the advantage of improved surface characteristics of the underlying amorphous silicon layer.

The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Further, the examiner notes that the improved surface characteristics allow for a nickel catalyst to be used in Ohtani et al., which accelerates the crystallization of the amorphous film. The combination of Zhang et al. and Ohtani et al. have also been relied upon to show the limitations of a metal catalyst for crystallization of the amorphous silicon.

Second, there must be a reasonable expectation of success. Since it is clear that the method of Ohtani et al. would form an oxide there is an expectation of success in the method of Zhang, which requires an oxide.

Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The examiner maintains that all limitations have been met by the combination of the Zhang et al. and Ohtani et al. as evidenced by the item by item matching in the detailed rejection of the claims.